

ABSTRACT OF THE DISCLOSURE

A method and system for acoustically logging a tubular for an interface with a material. The method includes having a tubular disposed within a bore hole with the material being disposed within the annulus. The method comprises producing a first acoustic ping from an acoustic sensor located in the tubular, and recording a plurality of sample readings. The method then includes establishing a first time gate defining a sample window that is inclusive of samples representing compressional wave reflections from the perpendicular incidence of the acoustic ping and first contact with the inner tubular wall, and recording the sample set defined by the first time gate. Next, the acoustic sensor is rotated and a second acoustic ping is produced. The method further comprises establishing a second time gate defining a sample window that is inclusive of samples representing compressional wave reflections from the perpendicular incidence of the acoustic ping and first contact with the inner tubular wall and recording the sample set defined by the second time gate.